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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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District Engineer  
Attn: Dr. Jon Moulding  
Army Corps of Engineers  
P.O. Box 4970  
Jacksonville, FL 32232-0019

Subj: Draft Supplemental Environmental Impact Statement (DSEIS) on the Interim Operational Plan (IOP) for Protection of the Cape Sable Seaside Sparrow

Dear Dr. Moulding:

Pursuant to Section 102(2) (C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) has reviewed the referenced U.S. Army Corps of Engineers (COE) Draft Supplemental Environmental Impact Statement (DSEIS) describing environmental impacts associated with water control/pumping/management strategies comprising preferred alternative "Alt. 7R". This alternative modifies a previously-implemented Interim Operational Plan designed to protect the Cape Sable Seaside Sparrow (CSSS), an endangered species living in and near Taylor Slough and in Big Cypress Swamp situated in southern Florida.

**Background** – In 1905 the Florida legislature passed the first comprehensive drainage law creating a board with authority to construct a system of canals designed to drain and reclaim swamp land (Tebeau, 1974). Following the genesis of the initial drainage law, a number of surface water drainage and diversion projects have been built which, although met the original design goals of the project, had unintended consequences adversely impacting wildlife species, a situation that became more evident in the 1960's and 1970's. In attempts to ameliorate the disruption of protected species and their habitats, more recent water management strategies attempted the restoration of more natural flows through the Everglades. These strategies included the Experimental Program, allowing the COE (in 1983) to deviate from minimum water deliveries to improve conditions within the ENP; the more recent Modified Water Deliveries plan, of which the final Tamiami Trail segment is scheduled for completion in 2008; and the C-111 Project which calls for five pump stations and levee-bounded retention structures to be built to control seepage out of the ENP, and at the same time, providing flood control protection to agricultural lands situated between Lake Okeechobee and the ENP.

In February 19, 1999, the U.S. Fish & Wildlife (FWS) released a Biological Opinion (BO) documenting the decline of the CSSS and identified the greatest threats to

its continued survival being vegetation changes, fire, development, and hydrologic alteration. The BO implicates controlling water levels within the Florida Everglades as having affected this species, which is dependent upon natural level fluctuation. The sparrow's breeding season typically extends over nearly half of the year (February – August), and depends on the characteristics of individual rainy seasons. Nesting activity decreases abruptly when the marsh they depend on becomes flooded. The BO determined that elements of the Experimental Program's hydrologic regimes caused jeopardy and adverse modification of sparrow critical habitat, and that incidental takes were anticipated. Similarly, operational modes of C-111 also were anticipated to cause sparrow incidental takes. In January, 2000, the Experimental Program was terminated and replaced with an Interim Structural and Operational Plan (ISOP) designed to meet FWS conditions defining the most reasonable alternative articulated in the B.O.

An FEIS, prepared by the COE in May, 2002, identified the environmental consequences of the on-going modifications in water management practices being implemented to benefit portions of the CSSS habitat in the ENP. These modifications, designed to prevent jeopardy to the continued existence of the endangered CSSS, also provided additional flood protection capability for development in lands east of the L-31N Canal. The COE proposed construction of an additional pump station (S-332C) and reservoirs designed to intercept seepage losses from ENP along the L-31N Canal. The pump station and seepage reservoirs are to supplement the capacity of the existing pump station (S-332B) to lower canal and groundwater levels in anticipation of significant storm events. In addition, a previously-authorized pump station, S-356, in the Tamiami Canal has been added as part of the water management plan. This will return seepage from the northern reach of the L-31N Canal to the Northeast Shark River Slough.

**Comments on Subject Document** - The subject DSEIS provides a final revised water management plan, known as Alt. 7R, to be implemented as the Interim Operational Plan for the protection of the CSSS. Alt. 7R is the end product of a mediation process between the U.S. Fish and Wildlife Service, National Park Service, Corps of Engineers, and South Florida Water Management District. The additional components associated with Alt. 7R, notably the inclusion of a second seepage reservoir and the addition of Pump Station S-332C and the removal of the southern four miles of Levee 67 Extension and canal, should address the water quality concerns expressed in EPA's previous comments, reiterated below, about discharges into ENP.

Water delivered to ENP must meet stringent water quality requirements. First, a U. S. District Court Settlement Agreement Consent Decree identified that an annual phosphorus long-term limit of 11 parts per billion must be met at inflows to the Taylor Slough/C-111 Basin. In addition, under the Consent Decree, if research were to determine the numeric value for the Class III narrative nutrient criteria results in a more stringent phosphorus limit for the ENP, then the more stringent limit shall apply. Florida has adopted and EPA approved a 10 ppb total phosphorus criterion for the Everglades Protection Area. Lastly, ENP is afforded a more stringent level of water quality protection as an Outstanding Florida Water.

We note that water quality concerns continue to echo in this document. Once the selected alternative has been constructed, future operations are critical in determining the quality of water that is delivered to the detention reservoirs, and subsequently, the ENP. Any water quality operational plan must also factor in Lake Okeechobee, with its enormous internal reservoir nutrient load accumulated during prior decades that will take a significant period, possibly on the order of 20 years according to the SDEIS, to be removed and/or stabilized. Most recently, the 2005 hurricanes have resuspended the nutrient rich sediments in the Lake such that average phosphorus levels in the lake are in the 200 – 300 ppb range. Although nutrients from Lake Okeechobee are not likely to be quickly reduced in the near term, some progress is evident. For example, the DSEIS (pg 57) stated that the flows entering the SRS under IOP since 2002 have been in compliance with interim limits of phosphorus, and the yearly interim concentration was 9.4 ppb, which is the same as calculated in the Settlement Agreement. From a water quality perspective, this is a positive development.

EPA supports implementation of this IOP as it appears to be the best practicable solution to the CSSS issue. Additional information, if available, would improve the DSEIS.

- The impact of Florida's anti-degradation policy (ADGP) (see F.A.C. 62-302.300, 62-302.700 or 62-4.242) for the two affected stream segments (Outstanding FL waters, Class III) on the proposed discharges should be considered. The water quality monitoring that has been initiated is a positive step and should be continued long-term to verify that project waters comply with state/federal standards. The water quality monitoring should include mercury and pesticides that are currently in use in the agricultural watershed. It is critical that data of known and documented quality be produced.
- Are there plans for post-construction WQ monitoring as requested by FWS and FFWCC? How would compliance with National and State criteria and standards be measured without any background data or any estimated loadings? If there are storm-water discharges with measurable concentrations of Hg, Cd, or BOD, are these likely to causing or contributing to the exceedance of a WQS? If so, would NPDES permit or CWA, Section 401 certification be needed?
- We could not find pre-EIS monitoring data for many of the FL WQS, including bacteria, nitrates/nitrites, ammonia, pesticides, turbidity, BOD, and DO, among others, nor for any sediment-related parameters. Except for some metals, compliance with all of the FL narrative and numeric water quality standards at F.A.C. 62-302.500, was not evident in the DSEIS.
- We could not find a commitment to mitigate specific wetlands losses attributable to the project, or to implement the mitigating measures discussed with FWS, FFWCC, EPD and Region 4 EPA. It would be beneficial to document any trade-offs against the loss of 3.4 FU of wetlands and a 5 to 10% loss of aquatic connectivity. Furthermore, there is a reference to "additional flood protection capability for development of lands east of L31N canal" that needs documentation also.

- We could not find compliance steps for the stormwater discharges associated with construction and operation of new equipment, or the removal of four miles of the levee at the south end of Levee 67 Extension and Canal. We assume that COE and their construction contractor will be required to file Notices of Intent to use an EPA or FL DEP general permit for stormwater discharges from both the construction and operations of the new facilities, along with preparation of a Stormwater Pollution Prevention Plan that implements the appropriate Best Management Practices (BMPs).

EPA reiterates that operational procedures should maximize the delivery of cleaner water to ENP and minimizes the influence of seepage water from urban/agricultural areas. Lessons have already been learned from operation of the S-9 structure, that is, use of appropriately sized pumps, for maintaining water quality which can be applied in the C-111 basin. If the subject system is initially designed to minimize the transport and influence of degraded water, this can greatly decrease the need for subsequent treatment prior to discharge into ENP. It should be noted that if Alt. 7R does not deliver the necessary quality of water, additional treatment costs may be incurred.

The water quality monitoring that has been initiated is a very positive step and must be continued long-term to verify that project waters comply with state/federal standards. The water quality monitoring should include mercury and pesticides that are currently in use in the agricultural watershed. With regard to all parameters, but especially total phosphorus, it is critical that data of known and documented quality be produced. This requires appropriate field sampling methods, and planning such that laboratory analytical methods, precision or accuracy are not in dispute. This would help to minimize future disputes about data quality.

Notwithstanding our concerns about the potential long-term impacts of poor water quality on the ENP, EPA supports implementation of this IOP as it appears to be the best practicable solution to the CSSS issue. This document was rated EC-2, Environmental Concerns, with suggestions for additional information on water quality. Thank you for the opportunity to comment on this action. If we can be of further assistance or if a meeting is desirable to discuss this and/or related water delivery projects, Richard Harvey (561-615-5292) and Dan Scheidt (706-355-8724) will serve as initial points of contact; for NEPA-related concerns please contact John Hamilton (404) 562-9617.

Sincerely,



Heinz J. Mueller, Chief  
Office of Environmental Assessment

**Literature Cited:**

U.S. Fish and Wildlife Service, 1999. Final Biological Opinion for the U.S. Army Corps of Engineers, Modified Water Deliveries to Everglades National Park, Experimental Water Deliveries Program, and the C-111 Project. Vero Beach, Florida

Tebeau, Carlton W. 1974. South Florida Water Management, pg 362. In: *Environments of South Florida*, Memoir 2, Miami Geological Society, Patrick J. Gleason, Ed.